

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-276941

(43)Date of publication of application : 06.10.2000

(51)Int.Cl. H01B 1/00
G09D 1/00
G09D 5/24
H01B 1/02
H01B 5/14
H01J 9/20
H01J 29/88
// G02B 1/11

(21)Application number : 11-081380

(71)Applicant : CATALYSTS & CHEM IND CO LTD
ASAHI GLASS CO LTD

(22)Date of filing : 25.03.1999

(72)Inventor : KOYANAGI TSUGUO
KOMATSU MICHIO
HIRAI TOSHIHARU
ABE KEISUKE
SANADA YASUHIRO

(54) COATING LIQUID FOR FORMING TRANSPARENT CONDUCTIVE FILM, SUBSTRATE WITH TRANSPARENT CONDUCTIVE FILM AND DISPLAY DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a transparent conductive film having surface resistance in a specific range and excellent in electromagnetic shielding effect, ultraviolet ray resistance and chemical resistance by containing ruthenium compound conductive fine grains containing ruthenium, boron and/or phosphorus in a coating liquid.

SOLUTION: Ruthenium compound conductive fine grains preferably contain ruthenium, boron and/or phosphorus as monomolecular grains, and the average grain size is set to the range of 1-200 nm, desirably 2-70 nm. The ruthenium in the ruthenium compound conductive fine grains is a ruthenium metal, and a ruthenium oxide and/or a ruthenium hydroxide is contained. The ruthenium compound contains one or more kinds of metals selected from a group of Au, Ag, Pt, Pd, Rh, Cu, Co, Sn, In and Ta and/or oxides of metals, thereby a substrate with a transparent conductive film having the surface resistance of 102-104 Ω /(square) is obtained.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japanese Patent Office